

Abstract

Systems and methods of reservoir fracture characterization are disclosed. In one embodiment, the method comprises: 1) obtaining seismic traces; 2) combining seismic traces into gathers that reveal acoustic reflectivity as a function of offset, azimuth, and position; 3) measuring reflection anisotropy as a function of position; 4) determining a relationship between reflection anisotropy and fracture intensity measurements at specific positions; and 5) applying the relationship to reflection anisotropy measurements to create a set of fracture intensity measurements at regularly-spaced positions.